

**TITLE:**

**OPTIMIZED COLLECTING, PROCESSING AND SHARING OF E-MAIL OPT-OUT,  
UNSUBSCRIBE OR REMOVE INFORMATION**

**INVENTORS:**

Michael Landau

Evan Horowitz

**BACKGROUND OF THE INVENTION:**

**1. Field of the Invention**

The present invention relates to the efficient management and distribution of e-mail opt-out, unsubscribe and/or remove information.

**2. State of the Art**

Currently, sophisticated subscription databases and mailing systems exist on many levels. But little attention has been paid to develop sophisticated opt-out or unsubscribe techniques. Very few entities even attempt to classify opt-out information beyond labeling it as a simple "Remove." Even "DO NOT E-MAIL" services simply provide limited "list washing" or "list cleaning" services for clients that remove addresses that should not be mailed. In addition, E-Mail Broadcasters lack sophisticated multi-channel source/distribution methods for opt-out and unsubscribe information, as such methods have not been imperative until recently. While many emailing systems have functionality that allow opt-out or unsubscribe e-mail lists to be imported and/or "checked against" or "purged," those systems do not have sophisticated collection, sharing and distribution mechanisms for optimized use.

Over the last decade, the rapid growth of the Internet is in part due to the extreme popularity of e-mail as a form of communications. One consequence of this has been the tremendous growth of unsolicited e-mail, both commercial and non-commercial, otherwise

known as SPAM. Although everyone's definition of SPAM varies slightly, new laws impose a burden to make sure that individuals who request not to be contacted, are not e-mailed again. With slight variations, this is known as a "DO NOT E-MAIL" list and is akin to the "DO NOT CALL" list associated with telemarketing.

In addition to the legal requirements that require opt-out and unsubscribe procedures, the new level of complexity involved with specialized hardware, list and campaign management among the various "entities" involved in sending e-mail demands more sophisticated and efficient use of opt-out information.

The "entities" involved can be broadly classified into three main categories:

The "List Owner" is the legal owner of the "relationship" with the e-mail address, presumably with the right to repeatedly communicate with the individual who receives e-mail to the address. It is assumed that the relationship exists until the recipient requests not to be e-mailed any more.

The "Product/Service Provider" relates specifically to the content or nature of the e-mail. In the case of an advertisement, this refers to the thing or things (products or services) that are being advertised or promoted in the e-mail.

The "E-mail Broadcaster" is the entity that actually sends/delivers the e-mail from a technical standpoint. Normally this implies that it is the Email Broadcaster's servers that are sending the e-mail.

The above entity "roles" can be filled by one single entity/organization or multiple entities that specialize in a particular function. For example, one company might own the list, provide the service advertised, and send the e-mail in-house. But increasingly, list owners want to diversify what they promote or advertise beyond the scope of their specialized field.

In addition, well-developed e-mailing services exist to handle the technical complexity of actually sending the e-mail. Many of these companies cater to entities whose e-mail lists are in the hundreds of thousands or millions, and require very specialized hardware and software.

In the event that there are separate organizations or companies involved with the sending of any particular e-mail as described above, a number of problems arise.

#### Compliance -

In terms of best practices or legal compliance, it becomes necessary to timely distribute (or make available) information to avoid e-mailing an individual who has recently requested to opt-out or unsubscribe.

#### Efficiency/Optimization -

Depending on the context of the opt-out or unsubscribe request, it becomes necessary to limit or classify the scope of the request.

#### Automation -

Because of the new level of complexity added by compliance issues and optimization needs, a certain level of automation is needed to streamline the process and also avoid human error and/or delay.

And even if only one entity is involved, current systems do not provide more than minimal opt-out or unsubscribe information management that hardly addresses the issues above.

In light of the above deficiencies and the ever evolving nature of the business, what is needed are certain list management functionality with numerous additional features to facilitate collecting, processing, sharing and using the information with all entities in mind.

## **BRIEF DESCRIPTION OF THE DRAWINGS:**

The invention, together with further advantages thereof, may best be understood by reference to the following description taken in conjunction with the accompanying drawings in which:

FIG. 1 is a sample Permission Spectrum illustrating the concept of "scope" of an opt-out request;

FIG. 2 is an example of a suitable embodiment of the invention;

FIG. 3 is a typical "DO NOT E-MAIL" real-time query use of the invention;

FIG. 4 is a sample evaluation of "best practices" or "legal standards" using the invention.

## **DETAILED DESCRIPTION OF THE INVENTION:**

According to certain embodiments of the invention, a request is received to opt-out or unsubscribe e-mail(s) from future e-mailings of a particular entity or entities. The request may also contain contextual data about the request itself. The information in (and about) the request is then stored in a database for future reference.

Next, the information in the database is processed, shared and updated to facilitate best practices or legally compliant use of opt-out information. Sharing occurs when information is aggregated, processed and distributed to entities associated with an opt-out or remove request. Updating and further processing of the database occurs when subsequent opt-out requests are received, re-subscription occurs, or contextual data is added.

Additionally, the invention can be used as a real-time on-the-fly "DO NOT E-MAIL" query engine. The invention may also be used to collect and share opt-in subscription information.

The foregoing, and other objects, features and advantages of the invention will be apparent from the following detailed description of the suitable embodiment(s) which make(s) reference to several figures.

The outline below is a sample of a suitable embodiment of the invention:

### **A. Opt-Out/Unsubscribe Information Collection**

- Sample Methods
  - Unsubscribe Submit Form
  - Unsubscribe Link
  - Suppression List Bulk Import
  - Automated Complaint Parsing
- Sample Features

- Accompanying Contextual Data
  - Scope of Request
  - Source of Request
  - Time/Date of Request
  - IP Address of Request
  - Other Data Associated with Request
- Configurable Collection Methods
- Synchronize data with external sources of opt-out, unsubscribe and remove information.

#### **B. Opt-Out/Unsubscribe Information Management**

- Global Opt-Out/Unsubscribe Clearinghouse Relational Database
- Complete Opt-Out History Archived
- Database Updated as New Information is Collected
- Secure/Encrypted Data

#### **C. Opt-Out/Unsubscribe Sharing & Distribution**

- Types of Sharing & Distribution
  - Real-Time Queries
  - Unsubscribe/Remove File Export
  - E-mail List Washing/Cleaning
- Sample Methods
  - File Transfer Protocol (FTP) - system can be configured to "drop" information to a remote server at a timed interval.
  - Graphical User Interface - such as a web site login where the information can be downloaded from after authenticating a user.
  - HTTP - such as a web site link which downloads the data.
  - E-mail - such that information is sent to a user via e-mail.
  - Automated Export to Mail Systems - information can interface directly with

external mail programs to synchronize data or provide information in real-time.

- Sample Features

- Configurable Distribution/Output Preferences
- Query/Processing Engine
  - Rule-Based: strict evaluation of data & conditions to determine output.
  - Learning-Based: adaptive/predictive evaluation of data & conditions to determine output.
- Configurable Rule Sets and Definitions

Paramount to understanding further use of the system requires an understanding of the possible "scope" of a particular opt-out or unsubscribe request, and how that scope can continually change. For example, one type of request could mean "NEVER E-MAIL ME AGAIN ABOUT ANYTHING" while another means "DO NOT E-MAIL ME ABOUT TOPIC A, BUT IT IS OK TO E-MAIL ABOUT OTHER TOPICS" while yet another means "DO NOT E-MAIL ME ABOUT ANYTHING EXCEPT TOPIC A". The scope of a request may also target other types of preferences such as "I DO NOT WANT TO RECEIVE E-MAIL FROM COMPANY B" or "I DO NOT WANT TO RECEIVE COMMERCIAL E-MAIL".

In deciding whether a prospective e-mail address is appropriate to send to, the "decision" or "confidence" engine might evaluate queries such as:

- a) Does the e-mail address appear on a "DO NOT E-MAIL" list?
- b) What is the content/topic/product/service of the e-mail to be sent?
- c) What country is associated with the IP address used to unsubscribe?
- d) What state is associated with the IP address used to unsubscribe?
- e) Who is sending the e-mail?
- f) Who owns the e-mail list?

- g) Has the e-mail address complained to any SPAM reporting services?
- h) How many opt-out requests exist for this e-mail address?
- i) What are the known demographics of the e-mail address?

Based on all the evaluations, the system will determine an appropriate answer and/or confidence level. Other possible queries to improve the evaluation process will be apparent to those skilled in the art.

Turning next to FIGS. 1 and 2, a first embodiment of the present invention will be described. In a suitable embodiment **200** of FIG. 2, as a result of a data collection operation **201**, opt-out or unsubscribe data is received by the invention. This data normally consists of an e-mail address and various contextual data which gives other information about the specific request. This information is typically transmitted via HTML forms, HTTP links, or imported in bulk via data file.

In an HTML form submission, an individual typically types in their e-mail address into a web page and presses "submit" to transmit the data. In some embodiments the e-mail address may already be pre-filled, such that only the "submit" need be pressed to transmit the data. When the information is collected via HTTP link, the user typically clicks on a web site URL to achieve this result. And when the collection occurs via imported data file, typically a list of e-mail addresses are sent, in bulk, to the system.

In a suitable embodiment, a user may configure how, and to what extent, opt-out or unsubscribe information is collected, **201**. In a further embodiment, the opt-out or unsubscribe information is collected by parsing an e-mail for valid e-mail opt-out or unsubscribe information. Other methods of collecting or importing opt-out or unsubscribe information will be apparent to those skilled in the art.



However the information is collected, contextual data may accompany an e-mail address. Sample contextual data includes:

- a) Source/Referral/Affiliate Information
- b) Time/Date Information
- c) Subscription Information
- d) Demographic/Geographic Information
- e) IP Address
- f) Other data that might affect the scope of the opt-out or unsubscribe request.
- g) Any other data the system may want to reference later.

Next, in data storage and processing operations **203**, the collected opt-out and unsubscribe information is archived for subsequent use. In a suitable embodiment of the invention, all information received about an e-mail, over subsequent data collections, is archived and updated as necessary, **209**.

Finally, in data sharing and distributing operations **205**, the stored opt-out and unsubscribe information is retrieved **204** from the database **203**, and processed according to established and re-configurable rules. Distribution occurs at **207** when the information is delivered externally or exported.

An example of a Permission Spectrum is found in FIG. 1, **100**, and is used to illustrate the concept of “scope.” As is evident in the diagram, permission questions sometimes entail more than a simple YES or NO answer. As such, the scope, breadth and type of all requests for a particular e-mail address are important for optimized usage.

The endpoints of the Permission Spectrum **101** and **106** represent opposite levels of permission to e-mail. Full permission is given at **101** to e-mail anything to an address, while no permission (a directive not to e-mail) is represented at **106**. The other points on the

spectrum, **102-105**, indicate varying degrees of permission to e-mail based on relative position to the endpoints, **101** and **106**. The positioning of these points are derived, in part, from processed contextual data.

For example, let's say that both Company A and Company B typically send e-mail about Company B's new product. Further, a recipient of the e-mail requests to Company A that they no longer wish to receive e-mail about Company B's product via e-mail. Thus, it becomes necessary for Company A to notify Company B of the request since the scope of the request affects Company B. In other words, it may not be sufficient for Company A to simply unsubscribe the e-mail address and not alert Company B of the request. Prior to this invention, this might be accomplished by providing more than one remove link within an e-mail, which requires a user to make repeated requests and is clumsy. This Invention improves and automates this process by providing a single configurable opt-out link, a clearinghouse database to assemble and store the data, and a process for intelligent sharing & distribution of the information. Basically, the system attempts to make an educated-decision by assembling all "remove" data about an e-mail address into a Permission Spectrum to see where a particular e-mail to be sent fits in.

In a suitable embodiment, the system may be queried in real-time, and when provided with one or more email addresses and other contextual information, respond whether or not sending a particular e-mail conforms to "legal standards" or "best practices" for each e-mail address **211-214, 300, 400**. In a simple example of this, FIG. 3, a query **301** can be made to determine whether the e-mail appears on the National "DO NOT E-MAIL" list. The system receives the input **302**, and retrieves information about the queried e-mail address in step **303**. If the information retrieved from the database, **203**, indicates the address appears on the "DO NOT E-MAIL" the system responds affirmatively, **304**. If the information retrieved indicates the address does not appear on the "DO NOT E-MAIL" the system responds as such, **305**.

In a more complex example of this, a newsletter subscriber may have indicated that he or she does not want to receive more e-mails about "cooking" via an opt-out or unsubscribe request, but the entity sending the e-mail may want to check to make sure it is permissible to send e-mail on the subject of "bowling". A query such as this can be processed through **401** in suitable embodiment **400** as shown in FIG. 4. At **402** the e-mail address and contextual data are received by the system. At **403** the information from the query is analyzed with the pertinent retrieved information from the database **203**. **405-407** represent possible responses by process **403**. Additionally, the manner in which the data is analyzed in process **403** is configurable in step **404**.

Integration and use of **300** and **400** in suitable embodiment **200**, is achieved in **211**, **212**, **213**, and **214**.

In another suitable embodiment, a user may configure how, and to what extent, opt-out or unsubscribe information is distributed, **210**.

In another suitable embodiment, a user may configure definitions of "legal standards" and "best practices" for rule processing purposes, **206**.

In yet another suitable embodiment, the system may synchronize information with external recipients of opt-out or unsubscribe information, **208**. For example, the system may interface with external emailing systems to provide updated unsubscribe information to remote servers.

In yet another suitable embodiment, the system may synchronize information with external sources of opt-out or unsubscribe information, **202**. For example, the system may interface with, and import, a National "DO NOT E-MAIL" list as provided by a U.S. authority.

In yet another suitable embodiment, the system may act as a list “cleaning” or “washing” service whereby an entire subscription list is evaluated against the database, and a “sanitized” or “purged” list is returned with the “removes” taken out.

In yet another suitable embodiment, all functions of the invention are performed in a secure or encrypted environment to prevent unauthorized access to sensitive information.